

Your Protection

How can people protect themselves and their families from E.coli infection?

- ▲ Cook meat to the right temperature. Freezing meat will not kill the E.coli bacteria, so you must cook the meat throughout.
- ▲ Cook all ground beef or hamburger well done to 155 degrees Fahrenheit or higher (internal).
- ▲ Use a meat thermometer.
- ▲ Meat should be brown throughout, not pink.
- ▲ Juices should be clear, not bloody.
- ▲ Don't let blood from raw meat drip onto other foods.
- ▲ Always place meat in a container on the bottom shelf of the refrigerator.
- ▲ Wash your hands often with hot soapy water.
 - Before preparing food or eating
 - Before and after diapering a child
 - After using the bathroom.
- ▲ When eating out or grilling, check hamburgers for doneness.
 - No pink should be in the center of the meat. Return any under cooked food for further cooking.
- ▲ Carefully wash all fruits and vegetables before eating.

In South Carolina, the Department of Health and Environmental Control (DHEC) requires all restaurants to cook ground beef products to an internal temperature of 155 degrees Fahrenheit or higher. It is the LAW and it is for your protection.

For more information please call:

DHEC's Division of Food Protection
(803) 896-0640
(803) 896-0645 fax



www.scdhec.gov

*Promoting and protecting the health of the public
and the environment*
Environmental Health/Food Protection

A Guide to E.coli:0157:H7

avoiding foodborne illness

Sources

Illness

Prevention

South Carolina Department of
Health and Environmental Control

What is *E.coli:0157:H7*?

E.coli:0157:H7 is bacteria that can make people very sick. It is found in beef products, including dairy, and in vegetation or animals that come in contact with cow manure. Unpasteurized fruit juices, alfalfa sprouts, lettuce, dry-cured salami, and wild game meat have been known to harbor the bacteria. Untreated water contaminated by runoff from cow manure is also a potential source of *E.coli*, and people can become sick by drinking or swimming in it.

*How is beef affected by *E.coli:0157:H7*?*

E.coli lives in the intestines of healthy cows. The bacteria may be on the surface of beef roasts and steaks, but it can be killed by cooking the surface of the meat to 155 degrees Fahrenheit.

Most reported cases of *E.coli* have come from undercooked hamburgers. When beef is ground into hamburger, the bacteria are mixed in. To kill the bacteria, the entire hamburger must be cooked to 155 degrees Fahrenheit internally or until the juices run clear.



*How can food be “cross-contaminated” by *E.coli*?*

- ▲ During slaughter, the bacteria may get into the meat itself.
- ▲ The bacteria present on the cow's udder or on equipment may get into raw milk.
- ▲ Apples may have the *E.coli* bacteria if cows grazed in the apple orchard. If fallen apples are in contact with cow manure, the apples could have the *E.coli* bacteria.
- ▲ Even melons and raw vegetables may be at risk if the field was fertilized with cow manure.

*Is *E.coli:0157:H7**

contagious?

Yes, it is highly contagious, and it can spread through unwashed hands. When people contaminated with *E.coli* fail to wash their hands after using the toilet, they can spread the bacteria to other people, especially children.



Foods Involved

- ▲ All beef and ground beef/hamburger
- ▲ Unpasteurized apple juice/cider
- ▲ Unpasteurized milk and other dairy products
- ▲ Untreated water contaminated by cow manure
- ▲ Alfalfa sprouts
- ▲ Wild game meat
- ▲ Lettuce
- ▲ Dry-cured salami
- ▲ Apples, melons, raw vegetables or any other food that may come into contact with cow manure

*What are the symptoms of *E.coli* infection?*

Symptoms appear three to eight days after eating contaminated foods

- ▲ Stomach cramps
- ▲ Bloody diarrhea
- ▲ Little or no fever
- ▲ Lasts five to ten days

If not treated quickly, *E.coli* infection can lead to complications that can be fatal.

*What are possible complications of *E.coli* infection?*

In children under 5 years of age and the elderly, *E.coli* infection can cause a complication called hemolytic uremic syndrome (HUS). About 2 to 7 percent of *E.coli* infections lead to this complication.

HUS can cause:

- ▲ Kidney failure
- ▲ Brain damage
- ▲ Strokes
- ▲ Seizures

In the United States, HUS is the leading cause of acute kidney failure in children. In most cases, *E.coli* causes HUS.

